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(54) METHODS AND SYSTEMS FOR FLUID CONTROL IN MICROFLUIDIC DEVICES

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- ABSTRACT (57)

The present invention relates to a valve for use in a microfluidic system. The valve includes a substrate defining an upstream channel and a downstream channel joined by a passage, wherein the passage comprises a first opposed wall disposed at an angle to a central axis of the upstream channel. A thermally responsive substance (TRS) obstructs the passage. At least a portion of the TRS that obstructs the passage abuts the first opposed wall. Upon the actuation of the heat source in thermal contact with the TRS an opening motion of the TRS opens the passage.

